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EXAMINER	
RAMPURIA, SHARAD K	

ART UNIT	PAPER NUMBER
2683	2

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/025,771	AOYAGI, KAZUNORI	
	Examiner	Art Unit	
	Sharad Rampuria	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: S24 on page 14, line 8. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-17, & 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oka in view of Ratayczak et al. [US 6259909] (hereinafter Ratayczak).

1. Regarding claim 1, Oka disclose a communication apparatus (1; fig.6) comprising:

an authentication code storage section; (105; fig.6)

an authentication section using an authentication code stored in said authentication code storage section; (Col.10; 8-21) and

an authentication code updating section configured to calculate a new authentication code and update the authentication code stored in said authentication code storage section with the new authentication code when the authentication performed by said authentication section is successful. (Col.10; 36-50)

Oka fails to disclose configured to perform authentication of another communication apparatus. However, Ratayczak teaches in an analogous art that configured to perform authentication of another communication apparatus. (Col.3; 8-15) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include configured to perform authentication of another communication apparatus in order to provide a method for securing access to data of a remote system using a communication apparatus.

2. Regarding claim 2, Oka disclose The apparatus according to claim 1, further comprising:

a comparator configured to compare an input authentication code with a predetermined authentication code; (Col.10; 8-21)

an ending section configured to end the authentication performed by said authentication section when both codes do not coincide with each other; (Col.10; 14-21) and

a starting section configured to operate said authentication section and said authentication code updating section when the both codes coincide with each other. (Col.10; 51-60)

3. Regarding claim 3, Oka disclose The apparatus according to claim 2, wherein said authentication section performs the authentication of the other communication apparatus using said input authentication code when the authentication code is not stored in said authentication code storage section. (Col.10; 8-21)

4. Regarding claim 4, Oka disclose The apparatus according to claim 2, wherein said authentication section performs the authentication of the other communication apparatus using identification data of the other communication apparatus and the authentication code which is the input authentication code when said authentication code storage section does not store authentication data of the other communication apparatus. (Col.10; 8-21)

5. Regarding claim 5, Oka disclose The apparatus according to claim 1, wherein said authentication section calculates authentication data based on identification data of the other communication apparatus and the authentication code and collates the calculated authentication data with authentication data of the other communication apparatus. (Col.10; 8-21)

6. Regarding claim 6, Oka disclose The apparatus according to claim 5, wherein said authentication section calculates the authentication data based on the identification data of the other communication apparatus, the authentication code and a random number. (Col.11; 49-63 & Col.18; 25-42)

7. Regarding claim 7, Oka disclose The apparatus according to claim 1, wherein said authentication code updating section subjects the authentication code stored in said authentication code storage section and used in the authentication to a predetermined calculation, and generates a new authentication code. (Col.10; 36-50 & Col.18; 43-51)

8. Regarding claim 8, Oka disclose The apparatus according to claim 7, wherein said authentication code updating section subjects the authentication code stored in said authentication code storage section and used in the authentication and a random number to the predetermined calculation, and generates the new authentication code. (Col.14; 43-52 & Col.18; 25-42)

9. Regarding claim 9, Oka disclose An authentication method, comprising:
transmitting predetermined data to the apparatus to be authenticated from the apparatus demanding authentication; (Col.9; 65-Col.10; 7)
calculating authentication data in the two communication apparatuses based on said predetermined data, an authentication code for calculation, and identification data of the apparatus to be authenticated; (Col.10; 8-21)
comparing the obtained authentication data of both the apparatuses with each other in the apparatus demanding authentication; (Col.10; 8-21) and
updating the authentication code for calculation in the two communication apparatuses based on the predetermined data and the authentication code for calculation when the authentication data of both the apparatuses coincide with each other. (Col.10; 36-50)

Oka fails to disclose an authentication method between two communication apparatuses. However, Ratayczak teaches in an analogous art that an authentication method between two communication apparatuses. (Col.3; 8-15) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include an authentication method between two communication apparatuses in order to provide a method for securing access to data of a remote system using a communication apparatus.

10. Regarding claim 10, Oka disclose The method according to claim 9, wherein an authentication code is input into each apparatus to be compared a predetermined authentication code and the authentication is ended when the input authentication code does not coincide with the predetermined authentication code. (Col.10; 8-21)

11. Regarding claim 11, Oka disclose The method according to claim 9, wherein an initial value of said authentication code for calculation is an input authentication code. (Col.10; 8-21)

12. Regarding claim 12, Oka disclose The method according to claim 9, wherein said predetermined data is a random number. (Col.11; 49-63 & Col.18; 25-42)

13. Regarding claim 13, Oka disclose A communication apparatus (1; fig.6), comprising: a comparator configured to compare an input first code or a prestored first code with a predetermined code; (Col.10; 8-21)

an ending section configured to end an authentication when the first code and the predetermined code do not coincide with each other; (Col.10; 14-21)

a transmitter configured to transmit a random number to the other communication apparatus when both of the first codes coincide with each other; (Col.11; 49-63 & Col.18; 25-42)

a collation section configured to calculate authentication data based on the random number, an authentication code, and identification data of the other communication apparatus, and collate the calculated authentication data with authentication data transmitted from the other communication apparatus; (Col.11; 49-63 & Col.18; 25-42) and

an updating section configured to update the authentication code based on the random number and the authentication code when both of the authentication data coincide with each other. (Col.10; 36-50)

Oka fails to disclose a communication apparatus having a function for authenticating another communication apparatus. However, Ratayczak teaches in an analogous art that a communication apparatus having a function for authenticating another communication apparatus. (Col.3; 8-15) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a communication apparatus having a function for authenticating another communication apparatus in order to provide a method for securing access to data of a remote system using a communication apparatus.

14. Regarding claim 14, Oka disclose The apparatus according to claim 13, wherein said updated authentication code is stored in a storage section, and said collation section uses the

input first code as the authentication code when the authentication code is not stored in the storage section. (Col.10; 8-21)

15. Regarding claim 15, Oka disclose a communication apparatus (1; fig.6) comprising:
a comparator configured to compare an input first code or a prestored first code with a predetermined code when authentication is requested by another communication apparatus; (Col.10; 8-21)
an ending section configured to end an authentication when the first code and the predetermined code do not coincide with each other; (Col.10; 14-21)
a receiver configured to receive a random number from the other communication apparatus;
a transmitter configured to calculate authentication data based on the random number, an authentication code, and identification data of own apparatus and transmit the calculated authentication data to the other communication apparatus; (Col.11; 49-63 & Col.18; 25-42) and
an updating section configured to receive a result of authentication from the other communication apparatus and update the authentication code based on the random number and the authentication code when the authentication is successful. (Col.10; 36-50)

Oka fails to disclose a communication apparatus having a function for authenticating another communication apparatus. However, Ratayczak teaches in an analogous art that a communication apparatus having a function for authenticating another communication apparatus. (Col.3; 8-15) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a communication apparatus having a function for authenticating another

communication apparatus in order to provide a method for securing access to data of a remote system using a communication apparatus.

16. Regarding claim 16, Oka disclose The apparatus according to claim 15, wherein said updated authentication code is stored in a storage section, and said transmission section uses the first code as the authentication code when the authentication code is not stored in the storage section. (Col.10; 8-21)

17. Regarding claim 17, Oka disclose an article of manufacture comprising:
a first computer readable program code for causing a computer to allow two communication apparatuses authenticate each other using authentication code; (Col.10; 8-21) and
a second computer readable program code for causing a computer to calculate a new authentication code, and update the authentication code, when the authentication is successful. (Col.10; 36-50)

Oka fails to disclose a computer usable medium. However, Ratayczak teaches in an analogous art that a computer usable medium having a computer readable program code embodied therein, the computer readable program. (E2; fig.7; Col.3; 8-15 & 59-67) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include a computer usable medium in order to provide a method for securing access to data of a remote system using a communication apparatus.

19. Regarding claim 19, Oka disclose a communication apparatus (1; fig.6) comprising:

an input section configured to input a first authentication code; (Col.9; 65-Col.10; 7)

an output section configured to output a second authentication code corresponding to the first authentication code input by the input section; (Col.10; 8-21)

an updating section configured to update the second authentication code to a code different from the second authentication code output from said output section when the authentication by the authentication section is successful. (Col.10; 36-50)

Oka fails to disclose an external apparatus. However, Ratayczak teaches in an analogous art that an authentication section configured to perform authentication for setting a communication link with an external apparatus using the second authentication code output from the output section. (Col.3; 8-15 & 59-67) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include an external apparatus in order to provide a method for securing access to data of a remote system using a communication apparatus.

20. Regarding claim 20, Oka disclose an authentication method of a communication apparatus (1; fig.6), the method comprising:

inputting a first authentication code; (Col.9; 65-Col.10; 7)

outputting a second authentication code corresponding to the input first authentication code; (Col.10; 8-21)

updating the second authentication code to a code different from the output second authentication code when the authentication is successful. (Col.10; 36-50)

Oka fails to disclose an external apparatus. However, Ratayczak teaches in an analogous art that performing authentication for setting a communication link with an external apparatus using the output second authentication code. (Col.3; 8-15 & 59-67) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include an external apparatus in order to provide a method for securing access to data of a remote system using a communication apparatus.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oka & Ratayczak further in view of Austin et al. [US 6393270] (hereinafter Austin).

18. Regarding claim 18, The above combination discloses all the particulars of the claim except the first program code causes a computer to calculate authentication data based on an authentication code shared by the two communication apparatuses. However, Austin teaches in an analogous art, that The article of manufacture according to claim 17, wherein the first program code causes a computer to calculate authentication data based on an authentication code shared by the two communication apparatuses, identification data of one of the two communication apparatuses, and a predetermined code generated by said one of the two communication apparatuses and transmitted to the other of the two communication apparatuses and to collate the authentication data of the two communication apparatuses. (Col.4; 14-23) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the first program code causes a computer to calculate authentication data based on an

authentication code shared by the two communication apparatuses in order to provide a authentication method in cellular communication.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is 703-308-4736. The examiner can normally be reached on Mon-Fri. (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Sharad Rampuria
August 3, 2004

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